

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	James R. H. Challenger, George P. Copeland, Arun K. Iyengar, Mark H. Linchan		
Assignee:	International Business Machines Corporation		
Title:	Method and System for Processing Multiple Fragment Requests in a Single Message		
Serial No.:	10/034,726	Filing Date:	December 19, 2001
Examiner:	Jeffrey R. Swearingen	Group Art Unit:	2145
Docket No.:	AUS920010856US1	Customer No.	65362

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December 22, 2008

REPLY BRIEF UNDER 37 CFR § 41.41

Dear Sir:

Applicants submit this Reply Brief in response to the Examiner's Answer mailed in this case on November 18, 2008. This reply will address selected arguments from the Examiner in the "Response to Argument" section of the Examiner's Answer, but will not attempt to address every argument since Applicants' Appeal Brief has previously addressed the appeal issues. It is believed that no fees are due in connection with the filing of this Reply Brief, however, the Commissioner is authorized to deduct any amounts required for this Reply Brief and to credit any amounts overpaid to Deposit Account No. 090447.

Regarding the claim rejections, Applicants respectfully submit that the claim requirement -- of searching the cache to determine that "a set of fragments associated with a set of source identifiers are not in the cache" and then "sending a first request message comprising the set of source identifiers" previously determined to be missing from the cache -- has not been disclosed or suggested by the Daugherty reference. *See, e.g.*, independent claims 1, 12, and 23 (emphasis added). In particular, the Examiner relies on Daugherty's disclosure (at column 5, line 49 through column 6, line 13) to meet the claim requirement of "searching a cache to determine that a set of fragments associated with a set of source identifiers are not in the cache, wherein a source identifier identifies a source location for obtaining a fragment" and then "sending a first

request message comprising the set of source identifiers.” Examiner’s Answer, p. 3. In response to Applicants’ explanation that Daugherty fails to anticipate the claim requirements that the “set of fragments” (plural) are the subject of the cache search and that a corresponding “set of source identifiers” (plural) are being sent in the first request message, the Examiner asserts incorrectly that “Appellant’s entire argument concerning this appeal is the mathematical definition of a set, and how many elements must be present in a set in order for it to be considered a set of elements.” Examiner’s Answer, p. 7. With all due respect, Applicants are not arguing the mathematical definition of the word “set,” but instead are relying on the explicitly stated plurality requirements of the claims to overcome Daugherty. In particular, the claim requirement of searching the cache to determine that “a set of fragments associated with a set of source identifiers are not in the cache” is not disclosed by Daugherty. Nor does Daugherty disclose “sending a first request message comprising the set of source identifiers” previously determined to be missing from the cache. As the underlining and boldfaced language confirms, the claims explicitly recite a “set of fragments,” not just a “set” or a “fragment set.” In similar fashion, the claims explicitly recite a “set of source identifiers,” not just a “set” or a “source identifier set.” Given the ordinary and customary meaning of the terms “fragments” and “source identifiers,” Daugherty does not anticipate the present invention’s claimed scheme for determining when a plurality of fragments are not cached, and then sending a first request message comprising the plurality of source identifiers associated with the missing fragments. While the Examiner invokes Daugherty’s disclosure in column 5, lines 48-63 of requesting clips from a first level cache 110 when the “XML data structures may be cached,” Daugherty makes it quite clear that any missing clips from a first cache 110 are retrieved one at a time from another (second) cache source. *See*, Daugherty, col. 6, lines 39-41 and col. 7, lines 9-34 (“If a particular clip requested by the ISAPI 106 is not in the first-level cache 110, the cache 110 requests the clip from the second server 104.”) (emphasis added).

In the Examiner’s Answer, the Examiner argues in the alternative that, even if Daugherty “is so narrowly read as to only allow for a single element to be present in a set, then the Office is providing evidence that a set can consist of a single element Dr. Thomas Jech’s entry in the Stanford Encyclopedia of Philosophy which is primer on mathematical set theory.” Examiner’s Answer, p. 8. In reply, Applicants submit that the proffered Jech evidence concerning the meaning of the term “set” is irrelevant to the recited claim requirements of searching the cache to

determine that “a set of fragments associated with a set of source identifiers are not in the cache” and then “sending a first request message comprising the set of source identifiers,” as explained above. In addition, the Examiner’s Jech “evidence” shows on its face that it was “first published Thu Jul 11, 2002,” and thus is not qualified as prior art evidence for Applicants’ invention which has a filing priority date of December 19, 2001, and provides no evidentiary support for how a person having ordinary skill in the art would understand the relevant claim language at the time of the invention. Applicants also submit that a combination of references may not be used to reject a claim as anticipated because “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Applicants submit further that the requirements of MPEP § 2131.01 for a multi-reference anticipation rejection are *not* met because Jech is being cited to show the alleged meaning of the claim term (namely, “set”), not the meaning of a term used in the Daugherty reference. Finally, Applicants submit that there has been no showing here of any “motivation to combine” evidence that would be required to support an obviousness rejection over Daugherty and Jech.

For at least the foregoing reasons, Applicants respectfully submit that a *prima facie* case of obviousness has not been established because neither Daugherty (nor any of the other cited references) disclose or suggest sending a request message that includes “a plurality of source identifiers” associated with the fragments not in the cache (as variously recited in the independent claims 1, 12 and 23). At best, Daugherty discloses an HTML clip caching technique whereby any clips missing from a first-level cache are retrieved one at a time from a second-level cache. With the present invention, multiple cache fragments are aggregated in a single response message by including a plurality of source identifiers for uncached fragments to more efficiently assemble a set of fragments. Because Daugherty does not disclose sending a request message in which are aggregated the source identifiers for the uncached fragments, Daugherty cannot be used as an anticipatory reference against the claims. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”). To the extent that each of dependent claims 2-3, 6-7, 9-10, 13-14, 17-18, 24-25, 28-29, and 31-32 each include the recited “set of

fragments” and “set of source identifiers” requirements by virtue of their dependency from claims 1, 12, and 23, Applicants respectfully submit that a *prima facie* case of obviousness has not been established showing that all the claim limitations are taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections because the Examiner has not established a *prima facie* case of anticipation or obviousness.

CONCLUSION

A *prima facie* case of anticipation and obviousness has not been established because none of the cited references discloses Applicants’ invention for searching the cache to determine that “a set of fragments associated with a set of source identifiers are not in the cache” and then “sending a first request message comprising the set of source identifiers” previously determined to be missing from the cache. In view of these deficiencies in the cited art, it is respectfully urged that the rejection of the claims should not be sustained.

CERTIFICATE OF TRANSMISSION

I hereby certify that on December 22, 2008, this correspondence is being transmitted via the U.S. Patent & Trademark Office’s electronic filing system.

/Michael Rocco Cannatti/

Respectfully submitted,

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